

URBAN PLANNING : A CONCEPTUAL FRAMEWORK

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Abstract

This paper examines the concept and approaches in urban planning. Urban planning is conceived as physical planning dealing with three key systems i.e. activity systems, land development system and environmental system. There has been shifting in emphasis in the practice of urban planning from a purely urban design approach to emphasis on environmental issues, planning methods and development of IT. This paper also touches on the importance of partnership approach in plan making and implementation.

1.0 Introduction

Urban planning either in the form of designing new urban settlements, promoting urban growth or as the regulation of urban development is an activity that has existed since the first civilisation. Although the nature, form and approaches to urban planning differ from place to place and are evolving, the basic purpose of planning still remains unchanged - to ensure healthy, safe and efficient urban environment for people to live in and perform their activities.

We adopt planning because of the belief that our actions that are based on planning will produce better results than without planning. We plan our actions beforehand to consider various factors that affect the outcome and to determine the possible future impacts of our current actions. Planning is also important to ensure that what we have decided will not only fulfill the needs of the present but also compatible with the needs of future generation.

Urban planning is becoming more vital as the society becomes more urbanized. The rapid rate of urban growth as the result of concentration of economic activities in urban areas and rural-urban migration has created various problems due to lack of planned development, such as squatters, traffic congestion, soil erosion, and environmental pollution. Extensive land clearing and slope cutting have not only damaged natural ecological systems but have also exposed vast areas of land to erosion and siltation of

streams and rivers. Degradation of the environment is more serious in large metropolitan areas such as the Klang Valley region, as a result of rapid urban development.

The environment in which planning operates is becoming more complex and dynamic. There is also an increasing awareness among the public on the issues related to environment and the need to manage natural resources and to produce quality living conditions. Pressure for the preservation of natural environment has also increased not only from within countries but also from international organizations.

2.0 Concepts Of Urban Planning

The concept of urban planning vary depending on the context, experience and practice of urban planning in particular places and time. In Britain, for example, until the early 1960s urban planning was strongly influenced by urban design tradition that viewed planning as the three dimensional design of towns (Healey, 1982). Urban planning was conceived as an activity that produced comprehensive master plans, design of neighbourhoods, garden cities and utopian ideals for cities. Later on as urban planning profession developed and with the influence of social scientific methodology, the focus of urban planning shifted from a prominently physical design exercise to the rational

urban planning shifted from a prominently physical design exercise to the rational procedure of producing plans and control over the development of the urban area.

This paper will focus on the basic concept of urban planning from a systematic point of view developed by Chapin and Kaiser (1979). This approach is still relevant, since the essence of urban planning is land use based, although the approach of planning today has changed from producing 'blue print' to the more strategic approach of structure and local planning.

Urban planning basically deals with the key systems that influence the physical structure of the city. These are activity systems, development systems and environmental systems. Activity systems as concerned with how man, through his institutions such as households, firms and governments, organises his affairs in the pursuit of human needs and how these institutions interact with one another in time and space. Activity systems determine demands for various urban spaces such as housing, recreation, commercial, urban facilities and infrastructure (Figure 1).

The land development system focusses on processes that convert space and adapt it for use of activity systems. The principal agents in the development systems include pre-development landowners, developers, consumers, financial intermediaries and public agencies. They relate to the supply side of the urban development process (Figure 2).

The third class of systems that influence urban development is the environmental systems that provide the niche for human existence and the habitat and the resources to sustain man. These include plant, animal life systems and the fundamental processes relating to water, air and matter. Environmental systems function both to constrain and to enhance the functioning of the other two system classes (Figure 3).

Urban planning is viewed as the process of intervention in the urban land use systems to achieve certain goals of urban development that relate to public interest such as sustainability, health safety, convenience, efficiency, energy conservation, environmental quality, social equity and amenity (Figure 4).

Planning activities include the preparation of development plans and the conducting of planning studies that can be used as guides for planning decisions. The preparation of development plans involves not only urban planners but also other various agencies and the public. The decision to adopt a particular plan and approval of development proposal is made by the state or local authority concerned. Development control is one of the important mechanisms in planning to ensure that the proposed urban development complies with planning guides.

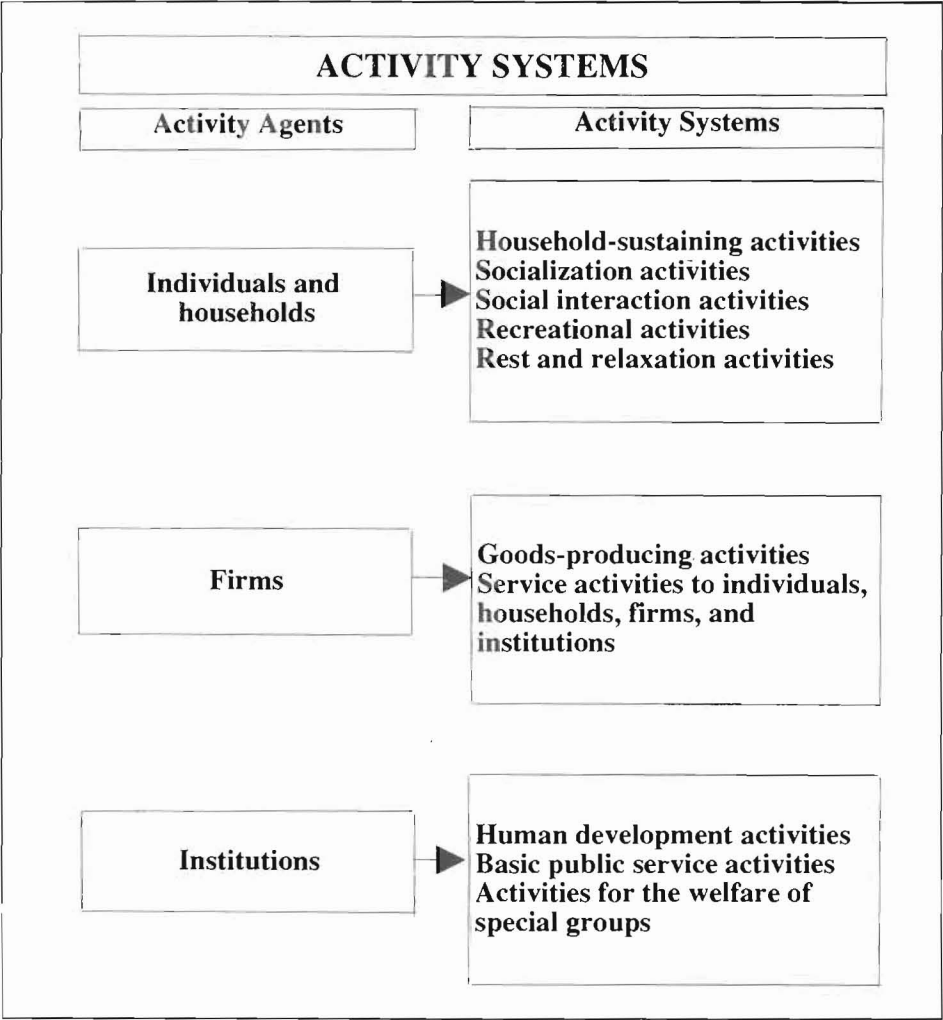
3.0 Shifting Themes In Urban Planning

3.1 Master Planning

Master planning is one of the earlier approaches to planning that is trying to solve urban problems through the medium of the plan or the blue print. Urban development regulations are based on land use map, zoning, density control, building regulation and planning standards. The approach attempts to influence or direct all activities related to the physical environment for the public benefit and amenity. Due to its physical nature and rigidity, the master planning approach is regarded as failing to deal with various social issues such as urban poverty, unemployment and urban inequalities, and such unable to cope with the rapid technological and economic change. The master planning approach incorporated under Town Board Enactment or Cap 137 was practiced in Peninsular Malaysia for at least 50 years until the end of 1970s, before it was replaced by a development planning system under the Town and Country Planning Act of 1976.

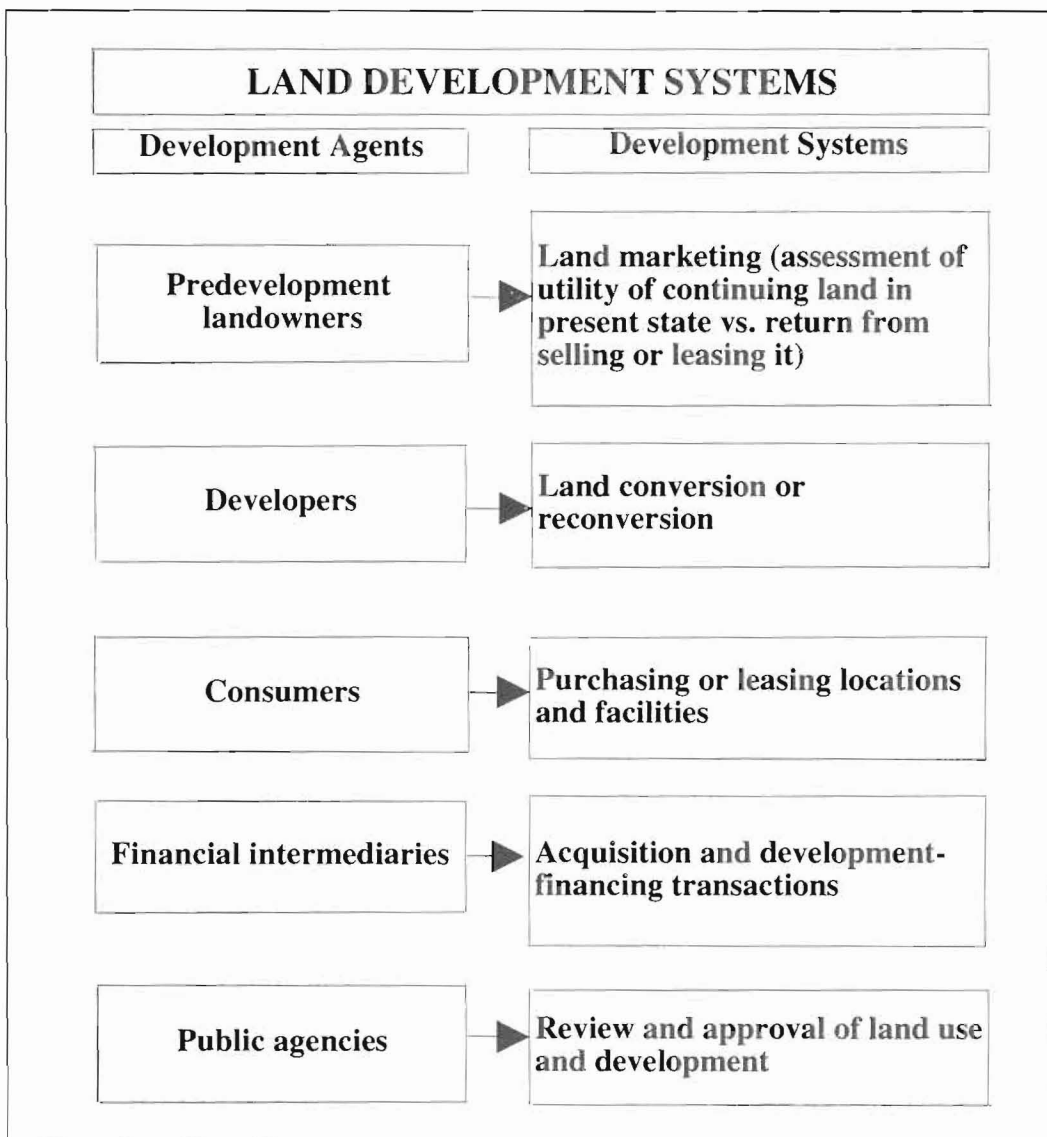
3.2 Procedural Planning

Procedural planning emphasises on solving urban problems based on rational procedures and methods for decision making. The procedures and methods basically focus on the planning process that begins with the clarification of policy goals, systematic analysis, logical generation of policy alternatives, systematic evaluation of these alternatives and monitoring performance. Urban planning is conceived as a continuous process of managing urban change. The plan, although in principle deals with land use matters, incorporates elements of social and



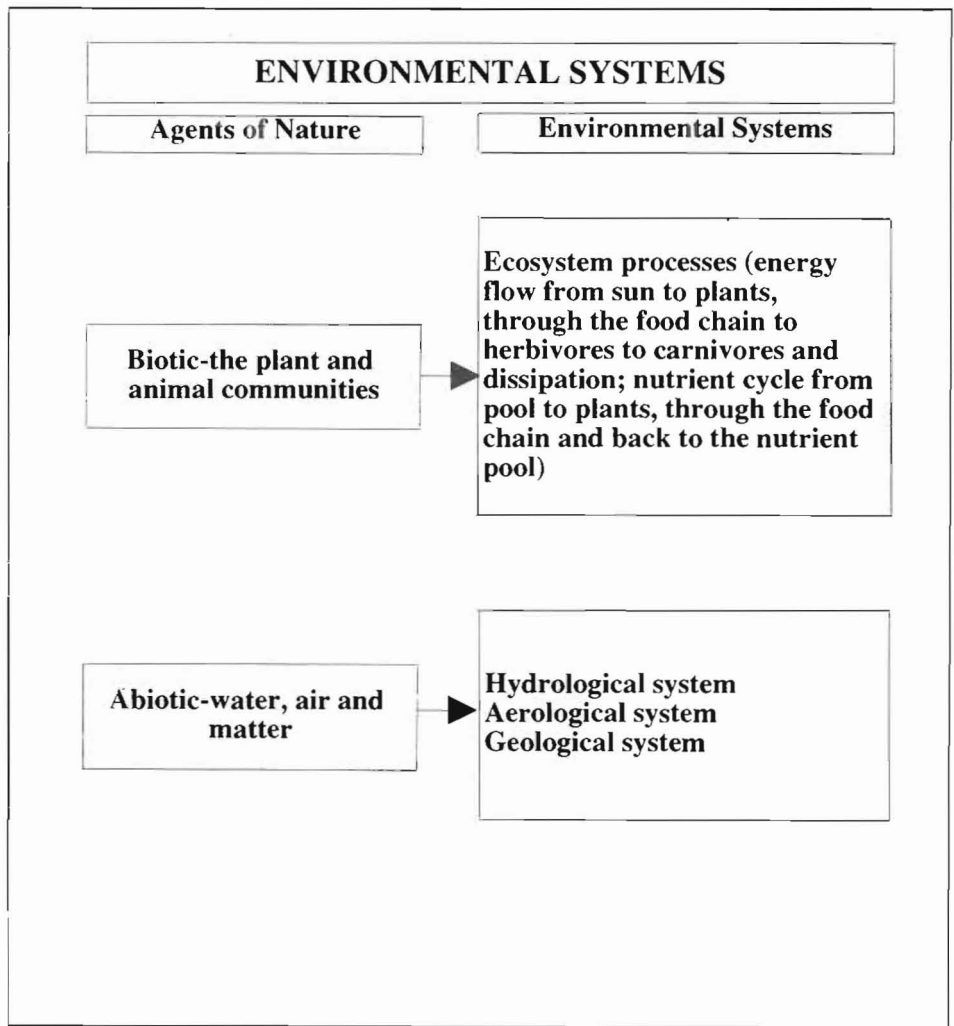
Source: Adapted from Chapin and Kaiser (1979:29)

FIGURE 1: ACTIVITY SYSTEMS



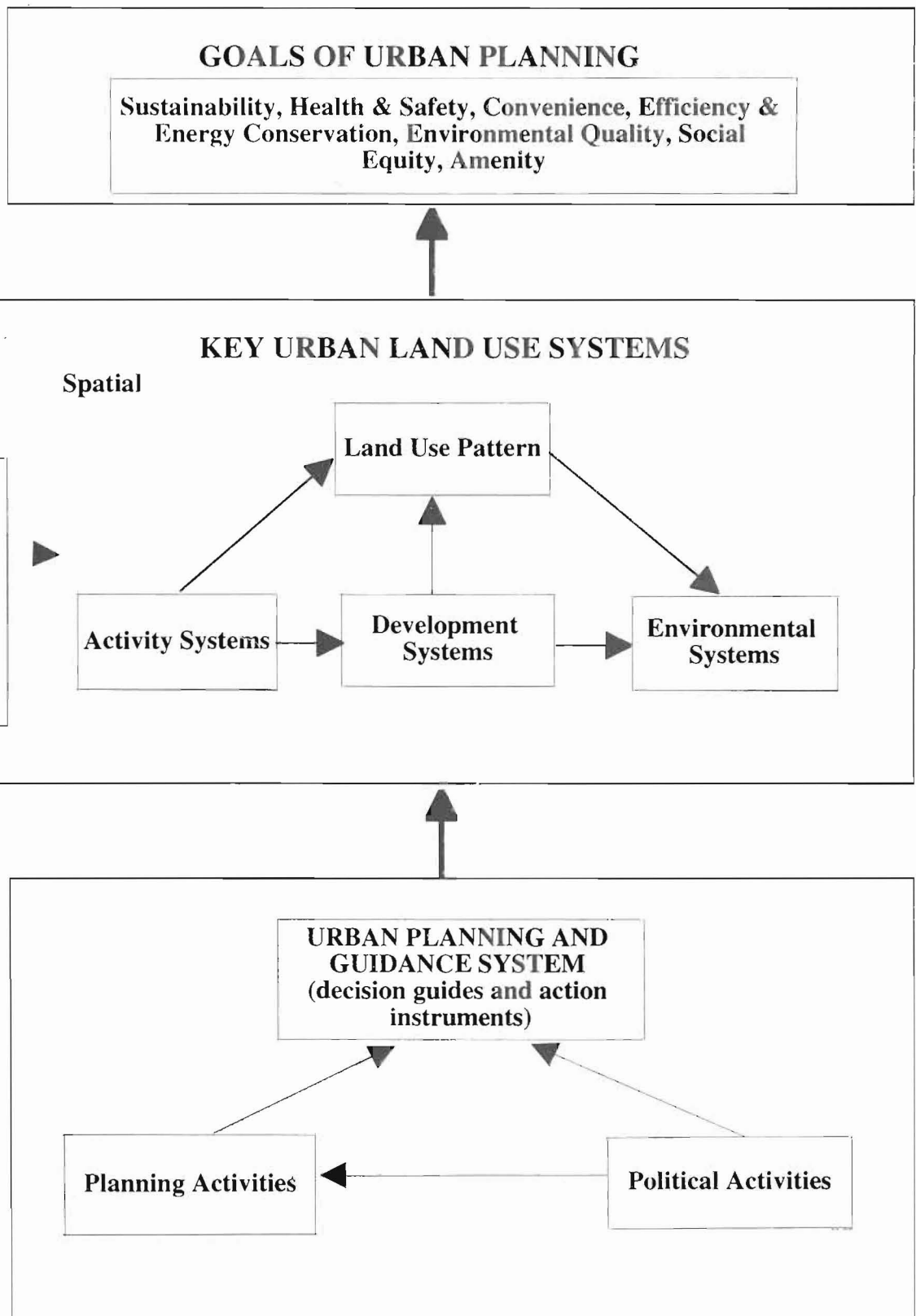
Source: Adapted from Chapin and Kaiser (1979:30)

FIGURE 2: LAND DEVELOPMENT SYSTEMS



Source: Adapted from Chapin and Kaiser (1979:30-31)

FIGURE 3: ENVIRONMENTAL SYSTEMS



Source: Adapted from Chapin and Kaiser (1979:65)

FIGURE 4: URBAN PLANNING FRAMEWORK

economic planning. The policies and proposals in the plan are constantly reviewed to monitor its performance and to make adjustment whenever necessary. The procedural planning approach was quite dominant in the UK until 1970s.

This approach is incorporated in the current development plan system in Peninsular Malaysia under the Town and Country Planning Act of 1976. The preparation of Structure Plan and Local Plan is supposed to follow the rational procedures and methods such as the systematic analysis of strategic sectors, identification of problems and issues, and the derivation of proposals on the basis of the findings. The public is also given opportunities to comment on the findings of the Report of Survey and also proposals in the Draft Plan which are exhibited.

In reality the implementation of procedural planning is basically too ideal given limited information available to fulfil the requirement for rational model. The political circumstances also inhibit the application of the rational model. The preparation of the plan was also time consuming because of the various procedures that needed to be followed before the plan could be gazetted. Given the rate of growth of the Malaysian economy and the rate of urban development, changes have occurred too quickly for the plan to cope. Although Structure Plan is claimed to be flexible, most of the plan that had been prepared are already outdated and some of them become obsolete even before gazetted. In addition, the development plan system had been too focused on the process and procedures of the preparation, with less thought given to developing proposals. As a result poor quality plan have in some cases been produced and many policies have not been implemented (Abdul Munit Kasimin, 1996).

3.3 The 1990s-Sustainable Development

Sustainable development emerged as a result of the increase awareness among the public on the issue of the environment, particularly in relation to problem of urbanization, degradation of the environment and depletion of resources. Earlier concern on environmental sustainability was expressed at the Biosphere Conference in Paris in 1968 which called for the conservation of natural resources in the interest of sustainable future use by mankind. However, the starting point

of the sustainable development concept that drew global attention was the declaration of the UN's Conference on Environment and Development at Rio de Janeiro in 1992 which issued Agenda 21. The conference marks the turning point for a more deliberate integration of environmental factors in planning and development. The following are some of the principles from Rio Declaration on Environment and Development (Selman, 1993) :

- Sustainable consumption of resources (environmentally sound use of new and renewable sources of energy and natural resources, purchasing policies etc.)
- Sustainable human settlements (innovative planning strategies, guiding cities along sustainable paths etc.)
- Integration of environment and development in decision making (in planning, EIA, data management etc).
- Sustainable Resource Management (protection of mountain areas, sustainable agriculture and rural development, conservation of biological diversity, protection of marine resources, including the integrated management and sustainable development of coastal areas).
- Environmentally sound management of solid wastes.

In response to the global issues of the environment, including the Agenda 21, as well as the few incidents on environmental disasters that have occurred within the last few years, some measures considering environmental factors in development have been taken by the Malaysian government in the planning process. In relation to urban planning in Peninsular Malaysia, the recent 1996 amendment of the Town and Country Planning Act of 1976 includes measures for the provision of adequate open spaces, the preservation of the natural topography, the protection of trees, the conservation and rehabilitation of buildings of historical significance, architectural merit and cultural heritage, and the needs to prepare and submit a Development Proposal Report which indicate the impact of the proposed development on the surrounding areas, when submitting application for approval of the development (Zainuddin, 1996). The impact of the new requirements in planning is yet to be seen, but basically its effectiveness depends not only on the commitment of planners but more importantly, the decision makers who approve the development and the developers who are directly involved in

the implementation of development projects on the ground.

3.4 Information Technology (IT) and Urban Planning

The period of the 1990s has seen rapid technological development, in particular the growth of information and telecommunication technologies. As mentioned by Peter Dicken (1992), the advances that have had great impact on development involve convergence of computer and telecommunication technologies into a single system of information processing and exchange. This enables global communication to take place easily and cheaply thus facilitate the firms to organise their activities across international boundaries and create a complex of inter linkages across nations that has been termed "globalization". Communication system have been transformed radically with the development of satellites technology and optical fibre networks linking together with computer technology. The impact of the IT has begun to take place as more people, firms and institutions are using the technology including personal computer, internet, fax and cellular phone for communication. It is too early to assess the impact on the behavior of the society although Alvin and Heidi Tofler (1994) did suggest some of the probable consequences to the society.

In urban planning, some ideas of integrating IT have been developed. The concepts such as an "Intelligent City", "Multi-media Super Corridor", "Eco-Media City" are some of the emerging themes in urban development and planning. The planning of the future city needs to incorporate the development of an IT infrastructure linking the global IT networks to individual units in urban centres.

4.0 Towards Partnership Approach In Urban Planning

The effective implementation of planning strategies and vision for the city depend on the actions of various actors in the urban development process. Within the context of liberalization, the role of the private sector will become more important in providing infrastructure and services to the public. The

public sector should play an important role as facilitator and enabling agent in the development process, providing an environment and mechanisms for the performance of the private sector to achieve the overall vision of development. The involvement of the private sector in urban development should begin from the formulation of the urban plan. This is important because the outcome of planning has important implications for future private investment. The involvement of the private sector will ensure that the plan formulated will not only consider the general interest of the public but also economic and financial implications of the plan. At the same time those in the private sector will be able to understand better the planning process and procedures for development and provide greater certainty in investment decision.

Under the current planning system in Peninsular Malaysia, the framework for public participation (including private sector) in the preparation of Structure and Local plans is provided under the Town and Country Planning Act of 1976. The participation of the public in the formulation of the Structure Plan is mandatory at two stages:

- a. After survey and analysis had been completed and the report of survey is ready for the public.
- b. When the draft structure plan is ready for public inspection at which time the public is allowed to make objections.

In the case of Local Plan only the draft plan is required to be made available for public inspection and comments.

The experience of Structure Plan shows that the participation from the public was not encouraging even in large metropolitan areas. The number of people visited the plan exhibition was relatively very small, and not many memoranda were received by the local authorities (Goh Ban Lee, 1991). The real reasons for the poor participation from the public are not known but it is obvious that the mechanisms of public participation adopted which allow participation only after the documents are completed is not effective.

In the process of plan formulation there is a need for supporting mechanisms, other than inviting participation through exhibition, for an effective involvement of the private sector,

departments and agencies, selected representatives from the private sector and other stake holders to provide continuous input to the process of plan preparation. This core group might function in a manner similar to a steering committee.

For wider participation a series of workshops and brainstorming sessions could be conducted to discuss local issues, formulation of vision, objectives and proposals.

5.0 Conclusion

Planning is needed much more today than in the past because we are dealing with more people, with different needs and expectations. The rapid advancement in technology not only increases the complexity of the urban situation but also increases the rate of change and magnitude of impacts. Urbanization also results in pressure for the rapid exploitation of natural resources; without proper management of resources there is a tendency towards degradation of the environment.

The partnership between public and private sectors in urban planning is one of the mechanisms for an effective implementation of urban development programs to achieve urban visions in the future.

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